

**DETAILED ACTION**

**EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE**

The Examiner acknowledges receipt of the amended specification for compound 12 which has been entered into record.

Applicant's amendments to the claims filed 07/20/09 and 11/24/09 have been fully considered. In light of the Applicant's amendments, claim 1 is allowed.

In light of the cancellation of claims 2-3, the 112, second paragraph rejections over claims 2-3 are withdrawn.

In light of the cancellation of claims 2-3 and the amendment of claim 1, the 112, first paragraph rejection over claims 1-3 is withdrawn.

In light of the amendment of claim 1 which now recites specific phenothiazine compounds for the treatment of a specific disease, the 102 (b) rejection of claim 1 as being unpatentable over Chang et al. (PNAS, 2001, Vol. 98, No. 17, pgs. 9803-9813) is withdrawn.

The following is an examiner's statement of reasons for allowance: Claim 1 is drawn to a method of treating a neurodegenerative disease or disorder with low SMN

protein levels wherein the neurodegenerative disease or disorder is spinal muscular atrophy, comprising administering an effective amount of a compound that replaces or enhances the function of SMN to alleviate or reduce the phenotype of cells with low SMN protein levels and further wherein the compounds are selected from the group consisting of phenothiazine compounds 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20. There is no prior art disclosing the applicant's method of treatment, particularly with the phenothiazine compounds disclosed in claim 1. The closest art was Chang et al. (PNAS, 2001, Vol. 98, No. 17, pgs. 9803-9813). Chang et al. teach the use of drugs that modify the pattern of SMN2 transcript in spinal muscular atrophy (SMA) patients to increase the full length SMN mRNA and thus the amount of SMN protein may have a therapeutic effect for SMA patients (see pg. 9808, right col., paragraph 2). Particularly, Chang demonstrated that oral administration of sodium butyrate to intercrosses of heterozygous pregnant knockout transgenic SMA-like mice decreased the birth rate of severe types of SMA-like mice and ameliorated SMA symptoms (see abstract, pg. 9811, and pg. 9812, left col., and table 1). However, sodium butyrate does not fall into the phenothiazine class of compounds and does not fall into the list of compounds claimed by applicant. Since the present claims require the use of phenothiazine compounds selected from the group delineated in claim 1, and Chang et al. alone do not anticipate the particular compounds of claim 1, claim 1 is therefore allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Claim 1 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samira Jean-Louis whose telephone number is 571-270-3503. The examiner can normally be reached on 7:30-6 PM EST M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/S. J. L. /

Examiner, Art Unit 1627

11/24/2009

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627